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
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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/620,522 | 07/16/2003 | Jimmie L. Stallings | STA515-00/99336A | 9005 |
| 24118 | 7590 | 10/28/2004 | EXAMINER | |
| HEAD, JOHNSON & KACHIGIAN 228 W 17TH PLACE TULSA, OK 74119 | | | ARK, DARREN W | |
| | | | ART UNIT | PAPER NUMBER |

3643

DATE MAILED: 10/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/620,522 | Applicant(s) STALLINGS, JIMMIE L.  | |
| | Examiner Darren W. Ark | Art Unit 3643 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 14-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 14-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 16, 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification does not disclose the use of air or an inert gas as the propellant. This was disclosed in parent application 10/423,679.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 14-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to claim 14, the preamble renders the claim vague and indefinite since it sets forth "An environmentally friendly insect eradication method and apparatus, said

Art Unit: 3643

method comprising...". The term "and apparatus" should be deleted so that it is clear that a method is being set forth in claim 14.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 14, 16-18 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by German Pat. No. 4236718 to Naber.

Naber discloses providing a canister (12) having a pressurized gas propellant (air) therein, the pressure is sufficient to introduce essentially all of the gas into the bore or other invaded structure (the air is capable of being both introduced and exhausted into an insect bore; steps of actually introducing all of the gas into the bore of a tree or invaded structure are not recited, since the limitations represent functional limitations) via an entrance to the bore such that an internal portion of the bore substantially increases above ambient pressure (the pressure increase would depend upon the size of the insect bore) such that the pressure substantially increases and thereby crushes or displaces an insect (see translation "The blast of compressed air kills without squashing"; depending upon size of the insect bore the amount of pressure would at least be capable of displacing an insect from a first position depending upon size and type of insect); the gas propellant has no biocidal properties (see translation "The

Art Unit: 3643

blast...without spreading toxic fumes...does not require chemicals...can be used in sensitive surroundings").

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over German Pat No. 4236718 to Naber in view of Diamond et al. 5,211,317.

Naber discloses a canister (12) with a pressurized gas propellant (air) therein with a pre-use internal pressure; a gas propellant operational valve (15) connecting the canister with a gas introduction nozzle (17), but does not disclose a pre-use internal pressure of about 75 psig to about 150 psig. Diamond et al. discloses a pre-use internal pressure of air being about 75 psig to about 150 psig (see cols. 4 & 5). It would have been obvious to a person of ordinary skill in the art to modify the canister of Naber such that it has a pre-use internal pressure of about 75 psig to about 150 psig in view of Diamond et al. in order to provide enough propellant to allow the can to be fully emptied yet also provide the gas at a safe pressure which will not cause the canister to distort or burst.

Art Unit: 3643

9. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson 5,309,669 in view of Diamond et al. 5,211,317 and Akehurst et al. 5,817,293 or Wells et al. 5,765,601.

In regard to claim 1, Jackson discloses a method of insect eradication comprising providing a canister (aerosol can or other pressurized canister 390) with a pressurized gas propellant with a pre-use internal pressure sufficient to introduce essentially all of the gas into the internal portion of an invaded structure (building) via an entrance such that the air pressure in the invaded structure substantially increases (air pressure is increased at least at the general location of emission); and inserting a gas introduction nozzle (394) provided with the canister into an entrance or exiting insect bore (aperture in wall 410 and also wall cavity area 420) in a manner which displaces (with the help of user; also see embodiment of Fig. 16) a valve mechanism (398) connected to the nozzle and the canister causing the propellant to enter the internal portion of the invaded structure (see Fig. 14) and displace an insect (see Fig. 14 and positions of insects which are different from the time before spraying; also emission from canister to the enclosed space behind the wall is capable of displacing an insect from a position adjacent to where the emission is directed depending upon size and type of insect), but Jackson does not disclose providing a canister with a pre-use internal pressure within the range of 75 psig to about 150 psig. Diamond et al. discloses a pre-use internal pressure of air being about 75 psig to about 150 psig (see cols. 4 & 5). It would have been obvious to a person of ordinary skill in the art to modify the canister of Jackson such that it has a pre-use internal pressure of about 75 psig to about 150 psig in view of

Art Unit: 3643

Diamond et al. in order to provide enough propellant to allow the can to be fully emptied yet also provide the gas at a safe pressure which will not cause the canister to distort or burst.

Jackson and Diamond et al. disclose the use of air, carbon dioxide, nitrous oxide, and nitrogen as gas propellants, but do not disclose the use of a fluorocarbon propellant. Akehurst et al. and Wells et al. disclose the use of a fluorocarbon propellant in the form of 1,1,1,2-tetrafluoroethane. It would have been obvious to a person of ordinary skill in the art to substitute the gas propellant such as air of Jackson and Diamond et al. for the fluorocarbon propellant in the form of 1,1,1,2-tetrafluoroethane of Akehurst et al. or Wells et al. in order to provide an alternative gas propellant to meet the user's needs that is also non-flammable and non-ozone depleting.

10. Claims 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson 5,309,669 in view of Diamond et al. 5,211,317.

In regard to claim 14, Jackson discloses an insecticide in the canister, but does not particularly disclose a gas propellant having no biocidal properties. Diamond et al. discloses that it is known to utilize a pressurized canister with a gas propellant having no biocidal properties (air; see col. 2, lines 34, 35) with a liquid (28) intended to be dispensed and that the propellant occupies head space (32; Diamond et al. discloses at col. 8, lines 30-36). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize a gas propellant in the canister of Jackson such that the gas propellant has no biocidal properties in view of Diamond et al. in order to provide a propellant that is chosen based more upon its properties in efficiently

Art Unit: 3643

dispensing the liquid contents rather than the propellant's ability to kill insects and because any biocidal properties in the propellant may adversely affect the liquid to be dispensed since an undesired chemical reaction may occur between them thus not allowing the user to easily change the composition of the liquid and knowing the ultimate effect.

Response to Arguments

11. Applicant's arguments filed 8/31/2004 have been fully considered but they are not persuasive.

In regard to applicant's argument that "Jackson...using an insecticide...space found between walls would not be suitable for the present invention...", the Examiner contends that although the intent of the desired invention is to utilize it using no insecticide in a tree bore, the claims do not presently recite method steps which particularly recite the desired invention in a manner which differentiates it from the methods of the prior art of record including Jackson. The claims in no way limit the desired invention to exclude the canister device with gas propellant of Jackson in view of Diamond et al. For instance, in claim 1 Jackson disclose using the device in an invaded structure by spraying insecticide under pressure into the structure which would inherently displace any insects in the immediate vicinity from where the insecticide was sprayed. The use of the desired invention exclusively within a tree bore using only pressurized air or fluorocarbon propellant has not been specifically recited in the claims. Claim 14 merely functionally recites the use of the device in either a tree bore or

Art Unit: 3643

invaded structure. Furthermore, claims 1 and 14 only require that the insects be either crushed or displaced and not both, wherein the term "displace" is defined as "to change place or position".

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

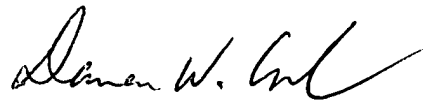
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 3643

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darren W. Ark whose telephone number is (703) 305-3733. The examiner can normally be reached on M-Th, 8:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on (703) 308-2574. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Darren W. Ark
Primary Examiner
Art Unit 3643

DWA